multiple mobile users, said receiver device including an adaptive chip equalizer capable of tracking said channel response and adapting one or more equalizer taps of said adaptive chip equalizer using said received pilot signal, said adapting for minimizing received symbol errors;

wherein said receiver device de-spreads said communications signal using a chipping sequence associated with that mobile user to extract the information symbols for that user from said single channel.

16. (New) The apparatus as claimed in Claim 15, wherein a power for a transmitted pilot signal is equal to the power transmitted for each user.

17. (New) The apparatus as claimed in Claim 16, wherein as power for a transmitted pilot signal increases, a power transmitted for each mobile user decreases for the same total transmitted power.

18. (New) The apparatus as claimed in Claim 15, wherein said means for generating a pilot signal further generates a plurality of pilot sequences each having a known chipping sequence and transmits said plurality of pilot signals simultaneously with said communications signal over said single channel, said mechanism for adapting one or more equalizer taps of said adaptive chip equalizer using each said received pilot signals.

19. (New) The apparatus as claimed in Claim 18, wherein said adapting mechanism executes at a greater speed using when adapting said adaptive chip equalizer based on said

received plurality of pilot signals as compared to when adapting based upon a single pilot signal, whereby said plurality of pilots enable efficient tracking of fast varying channels.

20. (New) The apparatus as claimed in Claim 15, wherein said pilot signal is transmitted continuously, said receiver device capable of performing continuous equalizer adaptation.

21. (New) A receiver for a communications system capable of receiving a communications signal including multiple information symbols comprising data sequences destined for multiple users simultaneously over a single channel having a channel response, said communications signal including a pilot signal having a known chipping sequence, said receiver comprising:

an adapting chip equalizer used for simultaneously receiving said communications signal and pilot signal and, obtaining an equalizer output; and

a device for de-spreading said equalizer output to obtain a data sequence for a particular user;

wherein one or more equalizer taps of said adaptive chip equalizer are adapted using said received pilot signal, said de-spreading device de-spreading said communications signal using a chipping sequence associated with that user to extract the information symbols for that user from said single channel.

22.(New) The receiver according to Claim 21, wherein said communications signal includes a plurality of pilot

sequences each having a known chipping sequence for transmission simultaneously with said communications signal over said single channel, said adapting chip equalizer adapting one or more of its equalizer taps using each said received pilot signal.

23. (New) The receiver according to Claim 22, wherein said adapting chip equalizer operates at a greater speed using when adapting based on said received plurality of pilot signals as compared to when adapting based upon a single pilot signal, whereby said plurality of pilots enable efficient tracking of fast varying channels.

24. (New) The receiver according to Claim 21, wherein said pilot signal is transmitted continuously for enabling continuous equalizer adaptation.--